

REMARKS/ARGUMENTS

Applicants thank the Examiner for his careful review of this application. Claims 1, 4, 6, and 7 have been amended. Claims 1-7 remain pending. Applicants respectfully request reconsideration of the application in view of the above amendment and the following remarks submitted in support thereof.

Rejections under 35 U.S.C. §112:

The Examiner rejected claims 1-7 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which Applicants regard as the invention. Applicants amended the independent claims 1, 4, 5, 6 and 7 from “prior to the adder unit completing the addition” to “upon having the adder unit complete the addition”.

In view of the foregoing, the Applicants respectfully request the Examiner to withdraw the 35 U.S.C § 112 rejection of independent claims 1, 4, 5, 6, and 7. Since the dependent claims 2 and 3 depend directly from claim 1, Applicants submit that the dependent claims are patentable under 35 U.S.C. §112 for the reasons set forth above. Therefore, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §112 rejection of claims 1-7.

Rejections under 35 U.S.C. §102:

The Examiner rejected claims 1-7 under 35 U.S.C. §102(b), as being anticipated by Oberman et al. (US Pat. 6,298,367). The rejection is respectfully traversed. The teachings of Oberman et al. do not show the currently claimed invention of independent claim 1. Independent claim 1 defines a processor that provides parallelism in a floating point adder unit. Parallelism is accomplished by having a correct rounding choice calculated using an

end-around-carry (EAC) value in parallel with the adder unit. In the claimed invention, the EAC bit is calculated and provided by the compare unit. Whereas, in Oberman, the right shifter 314A and right shifter 314 b provides the values to GRS logic and the selection unit 350 uses these values to calculate selection values for all possible scenarios. The right shifter 314a and 314b are similar to the mantissa alignment in the claimed invention. This implies that the invention in Oberman is not accomplishing parallelism as in the claimed invention.

Moreover, the Examiner asserts the compare unit of the claimed invention and the exponent comparator unit 308 are the same. In fact, the compare unit 308 in Oberman only receives the full exponent values of the two values that is to be added or subtracted. The comparator 308 does not function like the one in the claimed invention where the comparators make available an EAC value which is used to make a selection between the sum and the sum + 1. In fact, Oberman does not provide any element that is similar to the comparator of the claimed invention.

It is emphasized that Oberman et al. does not teach a parallel method (as claimed). This teaching is evident from Figures 6 and 9. Accordingly, the Applicants respectfully request that the Examiner withdraw the 35 U.S.C. § 102(b) rejection of claim 1.

To establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations (see MPEP2143). As can be seen from above, Oberman et al. does not teach all the features of the claimed invention. Since dependent claims 2-3 directly depend from independent claim 1, Applicants submit that the dependent claims are patentable under 35 U.S.C. § 102(b) for the reasons set forth above. Therefore, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. § 102(b) rejection of claims 1-3.

Independent claim 4 was rejected under 35 U.S.C. § 102(b), as being anticipated by Oberman et al. Applicants respectfully traverse the rejection. In support of the obviousness

rejection, the Examiner noted that Oberman et al. teaches a machine readable medium where floating point values are sent to a floating point execution unit and to a compare unit in parallel where the compare unit and the floating point execution unit are operatively coupled to an EAC value calculator. As described above, in Oberman the EAC value is not computed in parallel with the adder unit. The EAC value is calculated as part of the addition process. Also, Oberman does not have a compare unit that works in parallel with the adder unit as taught in the claimed invention. Therefore, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §102(b) rejection of claim 4.

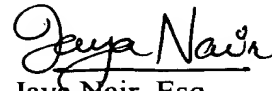
Similarly, independent claims 5, 6 and 7 all include the comparator unit providing an EAC value resulting from the addition of the mantissa portions of the two numbers to be added the EAC value calculation is done independent of the addition steps carried out by the adder unit. Accordingly, Applicants submit that the independent claims 5, 6, and 7 are patentable under 35 U.S.C. §102(b) for the reasons set forth above.

Conclusion

In view of the foregoing, the Applicants respectfully submit that all the pending claims 1-7 are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present Amendment, the Examiner is requested to contact the undersigned at (408) 749-6903. If any additional fees are due in connection with filing this Amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP285). A duplicate copy of the transmittal is enclosed for this purpose.

U.S. Application No. 09/632,235
Amdt. dated August 9, 2004
Reply to Office Action of April 7, 2004

Respectfully submitted,
MARTINE & PENILLA, L.L.P.


Jaya Nair, Esq.
Reg. No. 46,454

Martine & Penilla, LLP
710 Lakeway Drive, Suite 170
Sunnyvale, California 94085
Telephone: (408) 749-6900
Customer Number 32291